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| APPLICATION NO.      | FILING DATE                                    | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|----------------------|--|----------------------|---------------------|------------------|
| 10/724,767           | 12/02/2003                                     | Young Woo Yoon       | K-280A              | . 1795           |
| 34610<br>KED & ASSO( | 7590 03/09/2007                                | EXAMINER             |                     |                  |
| P.O. Box 22120       | 00   | TORRES, JOSEPH D     |                     |                  |
| Chantilly, VA 2      | 20153-1200                                     |                      | ART UNIT            | PAPER NUMBER     |
|                      |  |                      | 2133                |                  |
|                      |  |                      |                     |                  |
| SHORTENED STATUTOR   | ORTENED STATUTORY PERIOD OF RESPONSE MAIL DATE |                      | DELIVERY MODE       |                  |
| 3 MONTHS             |  | 03/09/2007           | PAPER               |                  |

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

|  |   | T   | 1 4 11  |  |  |  |
|--|---|---|---|--|--|--|
| Office Action Summary  |   | Application No.   | Applicant(s)  |  |  |  |
|  |   | 10/724,767  | YOON ET AL.   |  |  |  |
|  |   | Examiner  | Art Unit  |  |  |  |
| - X  |   | Joseph D. Torres  | 2133  |  |  |  |
|  | The MAILING DATE of this communication apports Reply  | pears on the cover sheet with the   | correspondence address  |  |  |  |
| WHIC<br>- Exte<br>after<br>- If NC<br>- Failu<br>Any   | IORTENED STATUTORY PERIOD FOR REPLY CHEVER IS LONGER, FROM THE MAILING Digensions of time may be available under the provisions of 37 CFR 1.1: r SIX (6) MONTHS from the mailing date of this communication. Diperiod for reply is specified above, the maximum statutory period vure to reply within the set or extended period for reply will, by statute reply received by the Office later than three months after the mailing led patent term adjustment. See 37 CFR 1.704(b). | ATE OF THIS COMMUNICATIO 36(a). In no event, however, may a reply be ti will apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONI | N. mely filed n the mailing date of this communication. ED (35 U.S.C. § 133). |  |  |  |
| Status   | •   |   | . /   |  |  |  |
| 1)⊠  | Responsive to communication(s) filed on 10 Ja   | 2007  |   |  |  |  |
| ,  | <u> </u>  | -   |   |  |  |  |
| 3)□  | •   |   |   |  |  |  |
| اللا   | 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.  |   |   |  |  |  |
|  | closed in accordance with the practice under E  | x parte Quayle, 1955 C.D. 11, 4   | 55 O.G. 213.  |  |  |  |
| Disposit   | ion of Claims   |   |   |  |  |  |
| 4)⊠  | Claim(s) 61-65,67 and 70-83 is/are pending in   | the application.  |   |  |  |  |
| 4a) Of the above claim(s) is/are withdrawn from consideration.   |   |   |   |  |  |  |
| 5) Claim(s) is/are allowed.  |   |   |   |  |  |  |
| 6)⊠ Claim(s) <u>61-65,67 and 70-83</u> is/are rejected.  |   |   |   |  |  |  |
| 7)   | Claim(s) is/are objected to.  |   |   |  |  |  |
|  | Claim(s) are subject to restriction and/or  | r election requirement.   |   |  |  |  |
|  | •   | 1   |   |  |  |  |
| Applicat   | ion Papers  |   |   |  |  |  |
| =  | The specification is objected to by the Examine   |   |   |  |  |  |
| 10)⊠   | The drawing(s) filed on <u>10 August 2006</u> is/are:   | a)⊠ accepted or b)☐ objected  | to by the Examiner.   |  |  |  |
|  | Applicant may not request that any objection to the   | drawing(s) be held in abeyance. Se  | e 37 CFR 1.85(a).   |  |  |  |
|  | Replacement drawing sheet(s) including the correct  | ion is required if the drawing(s) is ob   | ojected to. See 37 CFR 1.121(d).  |  |  |  |
| 11)[   | The oath or declaration is objected to by the Ex  | aminer. Note the attached Office  | Action or form PTO-152.   |  |  |  |
| Priority (   | under 35 U.S.C. § 119   |   |   |  |  |  |
| 12) 又  | Acknowledgment is made of a claim for foreign   | priority under 35 U.S.C. § 119(a  | n)-(d) or (f)   |  |  |  |
|  | 12)⊠ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a)⊠ All b)□ Some * c)□ None of:  |   |   |  |  |  |
| ,  |   | s have been received  |   |  |  |  |
|  | <ul> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No. 09/898,040.</li> </ul>  |   |   |  |  |  |
|  | 3. Copies of the certified copies of the priority documents have been received in this National Stage   |   |   |  |  |  |
|  | application from the International Bureau (PCT Rule 17.2(a)).   |   |   |  |  |  |
| * 0  | See the attached detailed Office action for a list  | •   | nd.   |  |  |  |
|  | occ the attached detailed Office action for a list  | or the certified copies not receive   | ьи.   |  |  |  |
|  |   |   |   |  |  |  |
| Attachmen  | nt(s)   |   |   |  |  |  |
| 1) Notice of References Cited (PTO-892)  4) Interview Summary (PTO-413)  |   |   |   |  |  |  |
| 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) Paper No(s)/Mail Date  3) ☑ Information Disclosure Statement(s) (PTO/SB/08) 5) ☐ Notice of Informal Patent Application |   |   |   |  |  |  |
| Paper No(s)/Mail Date <u>09/27/2006,12/11/2006</u> . 6) Other:   |   |   |   |  |  |  |
|  |   |   |   |  |  |  |

#### **DETAILED ACTION**

## Response to Arguments

1. Applicant's arguments filed 01/10/2007 have been fully considered but they are not persuasive.

The Applicant contends, "US Patent No. 7,127,661) recites the use of a puncturing block in the encoding step, and further recites "interleaving the result of the repetition or puncturing according to the channel interleaver size." Neither of these t-wo features are recited in independent claim 61 of the instant application. Hence, claim 61 can be literally infringed without literally infringing claim 43".

The Examiner disagrees and asserts that puncturing in claim 1 in US Patent No. 7,127,661 is a specific means for the rate matching in the Applicant's current claim 61; hence claim 61 is broader than claim 1 in US Patent No. 7,127,661.

The Examiner disagrees with the applicant and maintains all rejections of claims 61-65, 67 and 70-83. All amendments and arguments by the applicant have been considered. It is the Examiner's conclusion that claims 61-65, 67 and 70-83 are not patentably distinct or non-obvious over the prior art of record in view of the reference, claims 43, 45, 47, 49-55, 84 and 85 of copending Application No. 09/898,040 (now US Patent No. 7,127,661) as applied in the last office action, filed 10/11/2006. Therefore, the rejection is maintained.

Art Unit: 2133

## Double Patenting

Page 3

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., In re Berg, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); In re Goodman, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); In re Longi, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); In re Van Ornum, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); In re Vogel, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and In re Thorington, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 61-65, 67 and 70-83 are provisionally rejected on the ground of nonstatutory double patenting over claims 43, 45, 47, 49-55, 84 and 85 of copending Application No. 09/898,040. This is a provisional double patenting rejection since the conflicting claims have not yet been patented.

See the Non-Final Action filed 10/11/2006 for detailed action of prior rejections.

Claims 61-65, 67 and 70-83 are rejected on the ground of nonstatutory obviousnesstype double patenting as being unpatentable over claims 1-12 of U.S. Patent No. US 7127661 B2.

Art Unit: 2133

See the Non-Final Action filed 10/11/2006 for detailed action of prior rejections.

#### Conclusion

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph D. Torres whose telephone number is (571) 272-3829. The examiner can normally be reached on M-F 8-5. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Albert Decady can be reached on (571) 272-3819. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

> Joseph D. Torres, PhD **Primary Examiner** Art Unit 2133